# UNITED STATES PATENT AND TRADEMARK OFFICE

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| 10/720,182 | 11/25/2003 | Massimo Canali | Q78651 | 4213 |

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| EXAMINER |
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| DUONG, OANH L |

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DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>03</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>25 November 2003</u>.

2a)☐ This action is **FINAL**.     2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-9</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-9</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>25 November 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

        1.☒ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>02/26/04</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

## DETAILED ACTION

1.      Claims 1-9 are presented for examination.


### *Information Disclosure Statement*

2.      The information disclosure statement (IDS) submitted was filed on February 26,

2004. The submission is in compliance with the provisions of 37 CFR 1.97.

Accordingly, the information disclosure statement is being considered by the examiner.


### *Claim Objections*

3.      Claims 3, 5, and 7 are objected to because of the following informalities:


4.      Claim 3 recites the limitations "said Corba Strategy Gateway interface" in lines

17-18, "the operations" in line 19, and "the specific characteristics" in line 20. There are

insufficient antecedent basis for those limitations in the claim. For the purpose of

examination, examiner assumes "said Corba Strategy Gateway interface" is "the

interface".


5.      Claim 5 recites the limitation "said methods" in line 2. There is insufficient

antecedent basis for this limitation in the claim.

6.      Regarding claim 7, some typographical error has been found (i.e., "methof" in line

3 should be "method").

        Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

7.      Claims 1, 2 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

8.      Regarding claims 1, 2 and 7, the phrases "namely" and "such as" renders the

claims indefinite because it is unclear whether the limitations following the phrases are

part of the claimed invention.  See MPEP § 2173.05(d).

### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
conditions and requirements of this title.

9.      Claim 8 is rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

10.     Claim 8 is not limited to tangible embodiments. The claim recited "Computer

program comprising..." is nonstatutory. Since claim 8 recited "Computer program

comprising..." is just limited to a functional descriptive materials" consists of computer

program per se, instead of being defined as including tangible embodiments (i.e., a

computer readable storage medium such as memory device, storage medium, etc.,). As

such, the claim is not limited to statutory subject matter and is therefore nonstatutory.

To overcome this type of 101 rejection, examiner suggests applicants to amend

the claim to include computer readable storage medium to store computer codes (for

example, the claim should be amended as "A computer program comprising computer

program code means embodied in a computer readable storage medium, when

executed by computer, to perform all method steps of claim 1..." see MPEP 2106

section V. DETERMINE WHETHER THE CLAIMED INVENTION COMPLIES WITH 35

U.S.C. 101 under subsection 1. Nonstatutory subject matter.

## Claim Rejections - 35 USC § 102

11.     The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12.     Claims 1-2, and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by

**Davis** et al. (hereafter, Davis) U.S. Pub. No. **2002/0004828** A1.

13.     Regarding claim 1, **Davis** teaches method for setting up a generic protocol

relationship between network elements, namely a Network Manager (NMS application

201) and Network Element agent (EMS application 501), in a telecom network

(telecommunications network, page 3 paragraph [0038] (Figs 4-5), wherein

an interface is created between Common Element Manager (i.e., EMS 202, Fig.

4) and Network Management layers (NMS application 201, Fig. 4) (i.e., *functional*

*interface is characterized by creating a name, syntax, parameter lists and associated*

*callback method for selected function(s)*, page 6 paragraph [0076]), to be protocol and

model independent, as a generic layer for syntactical adaptation between Network

Manager and network element (i.e., *regardless of the network element's type and*

*protocol,* page 6 paragraph [0082]), without taking into account the semantic of the

exchanged messages (*i.e., "COBBAIDL compiler is used to facilitate the establishment*

*of the correspondences between element-dependent and element-independent*

*upstream network management message, and between element-dependent and*

*element-independent downstream network management messages", page 9 paragraph*

*[0128]);*

said interface being composed by a number of generic methods (i.e., *"the*

*functional interface is characterized by creating name, Syntax, parameter list and*

*associated callback method for the selected function"*, page 6 paragraph [0076]-page 7

paragraph [0115]) hiding different protocol operations (i.e., *"mapping the upstream*

*element dependent network management message into a upstream element-*

*independent network management message selected from a core set of upstream*

*element-independent network management messages, and into a common element –*

*independent message protocol"*, page 8 paragraph [0125]).

14.     Regarding claim 2, **Davis** teaches method according to claim 1, wherein said

generic methods:

describe common operations, such as GET, SET, CREATE, DELETE, of the

protocol used for communication between Network Manager and Network Element (i.e.,

*"the basic fiber optic device network management functions comprises the functions of*

*retrieving, entering, editing and removing"*, page 6 paragraph [0076],

also comprise a method for managing Network Element common service, such

as alarm (i.e., *"an alarm"*, page 3 paragraph 41) and NE management (i.e., *provide the*

*core network management message common to all NEs in the Element Management*

*system*, page 10 paragraph [0135]).


15.     Claim 7 recites a telecom network comprising means for implementing the

method, taught by the prior art as identified on claim 1, discussed above, same rationale

of rejection is applicable.


16.     Claim 8 recites computer program comprising computer program code means

adapted to perform the method, taught by prior art as identified on claim 1, discussed

above, same rationale of rejection is applicable.


17.     Claim 9 recites computer readable medium having a program recorded thereon,

said computer readable medium comprising computer program code means adapted to

perform the method, taught by prior art as identified on claim 1, discussed above, same

rationale of rejection is applicable.


### *Claim Rejections - 35 USC § 103*

18.     The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

19.     Claims 3-4 are is rejected under 35 U.S.C. 103(a) as being unpatentable over

**Davis**, in view of **Natsukawa** et al. (hereafter, Natsukawa), JP Pub. No. **2000242584 A**.


20.     Regarding claim 3, **Davis** teaches method according to claim 1, wherein said

Corba Strategy Interface (i.e., *functional interface*, page 6 paragraph [0076]):

is created starting from checking which are the operations permitted by each

single protocol and which are the specific characteristics of each language (page 4

paragraphs [0052]-[0054] and page 7 paragraphs [0115]-[0116]).

is defined as offering the minimal functionality provided by the more complex

protocol, SNMP, mainly/meaning containing generic GET and SET methods (page 4

paragraph [0054] and page 6 paragraph [0076].

**Davis** does not explicitly teach CMIP protocol.

**Natsukawa** teaches the network management system wherein an interface

conversion method is provided (see abstract). **Natsukawa** teaches CMIP protocol is

used (page 1 paragraph [0001].

It would have been obvious to one of ordinary skill in the art at the time of the

invention was made to incorporate the CMIP protocols of **Natsukawa** in the element

management system in **Davis.** One would be motivated to do so to simplify the

procedure which is needed for a client side especially, its interface conversion approach

and its processing program (Natsukawa, page 1 paragraph [0001]).


21.     Regarding claim 4, **Davis** teaches method according to claim 2, wherein said

Corba Strategy Interface (i.e., *functional interface*, page 6 paragraph [0076]):

is created starting from checking which are the operations permitted by each

single protocol and which are the specific characteristics of each language (page 4

paragraphs [0052]-[0054] and page 7 paragraphs [0115]-[0116]).

is defined as offering the minimal functionality provided by the more complex

protocol, SNMP, mainly containing generic GET and SET methods (page 4 paragraph

[0054] and page 6 paragraph [0076].

**Davis** does not explicitly teach CMIP protocol.

**Natsukawa** teaches the network management system wherein an interface

conversion method is provided (see abstract). **Natsukawa** teaches CMIP protocol is

used (page 1 paragraph [0001].

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the CMIP protocols of **Natsukawa** in the element management system in **Davis.** One would be motivated to do so to simplify the procedure which is needed for a client side especially, its interface conversion approach and its processing program (Natsukawa, page 1 paragraph [0001]).


22.    Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Davis**, in view of **Natsukawa**, and further in view of **Warren**, U.S. Pub. No. **2003/0204612 A1**.


23.    Regarding claim 5, **Davis** teaches method according to claim 3, wherein said methods are defined using CORBA IDL language (Interface Data Language) (i.e., "using CORBAIDL, a structure is defined for function's input parameter", page 6 paragraph [0077]).

the combination of **Davis and Natsukawa** does not explicitly teach parameters, common meta-language commands, written in XML language.

**Warren** teaches system and method for facilitating communication, managing and controlling in a network wherein at least one device command is translated into different second protocol (see abstract). **Warren** teaches parameters, common meta-language commands, written in XML language (page 2 paragraph [0025] and page 4 paragraph [0042]).

It would have been obvious to one of ordinary skill in the art at the time of the

invention was made to incorporate XML language of **Warren** in the process of

creating/defining the functional interface in **Davis and Natsukawa**. One would be

motivated to do so to allow designers to create their own customized tags, enabling the

definition, transmission, validation, and interpretation of data between applications and

organizations.


24.    Regarding claim 6, **Davis** teaches method according to claim 4, wherein said

methods are defined using CORBA IDL language (Interface Data Language) (i.e.,

"using CORBAIDL, a structure is defined for function's input parameter", page 6

paragraph [0077]).

The combination of **Davis and Natsukawa** does not explicitly teach parameters,

common meta-language commands, written in XML language.

**Warren** teaches system and method for facilitating communication, managing

and controlling in a network wherein at least one device command is translated into

different second protocol (see abstract). **Warren** teaches parameters, common meta-

language commands, written in XML language (page 2 paragraph [0025] and page 4

paragraph [0042]).

It would have been obvious to one of ordinary skill in the art at the time of the

invention was made to incorporate XML language of **Warren** in the process of

creating/defining the functional interface in **Davis and Natsukawa**. One would be

motivated to do so to allow designers to create their own customized tags, enabling the

definition, transmission, validation, and interpretation of data between applications and

organizations.


## *Conclusion*

25.    The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure:

a.    Babka et al., US Pub. No. 2003/0028679 A1, discloses system and

method for managing video network device.

b.    Theeten, US 6,968,553 B1, discloses element manager common gateway

architecture system and method.

c.    Kiriha et al, US 6,490,255 B1, discloses network management system.

d.    Son, KR 2002055213 A, discloses interface apparatus between NMS and

EMS of network management system and method therefor.

e.    Allavarpu et al., US 6,915,324 B1, discloses generic and dynamic

mapping of abstract syntax notation to and from interface definition language for

network management.

f.    Barker et al., US 6,363,421 B2, discloses method for computer Internet

remote management of telecommunication network element.

g.    Jones et al., US 6,044,407, discloses interface for translating an

information message from one protocol to another.

h.    Li et al., US 2005/0108387 A1, discloses system and apparatus for

network management system using presence and instant message techniques.

i.      Low, US 2003/0101251 A1, discloses customizable element management

system and method using element modeling and protocol adapters.


26.    Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Oanh Duong whose telephone number is (571) 272-

3983. The examiner can normally be reached on Monday- Friday, 2:00PM - 10:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Oanh Duong

January 4, 2006